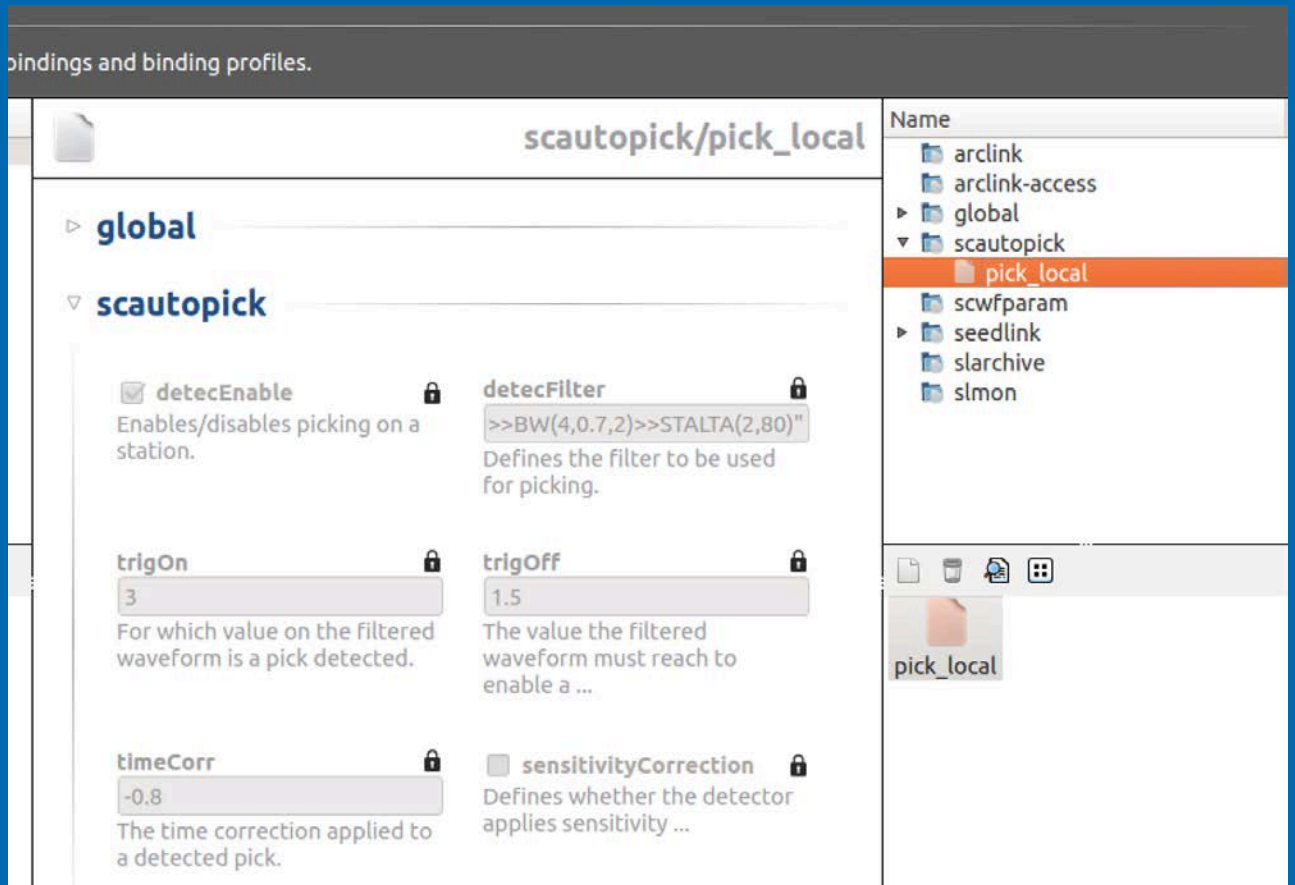
SeisComP3 Playback

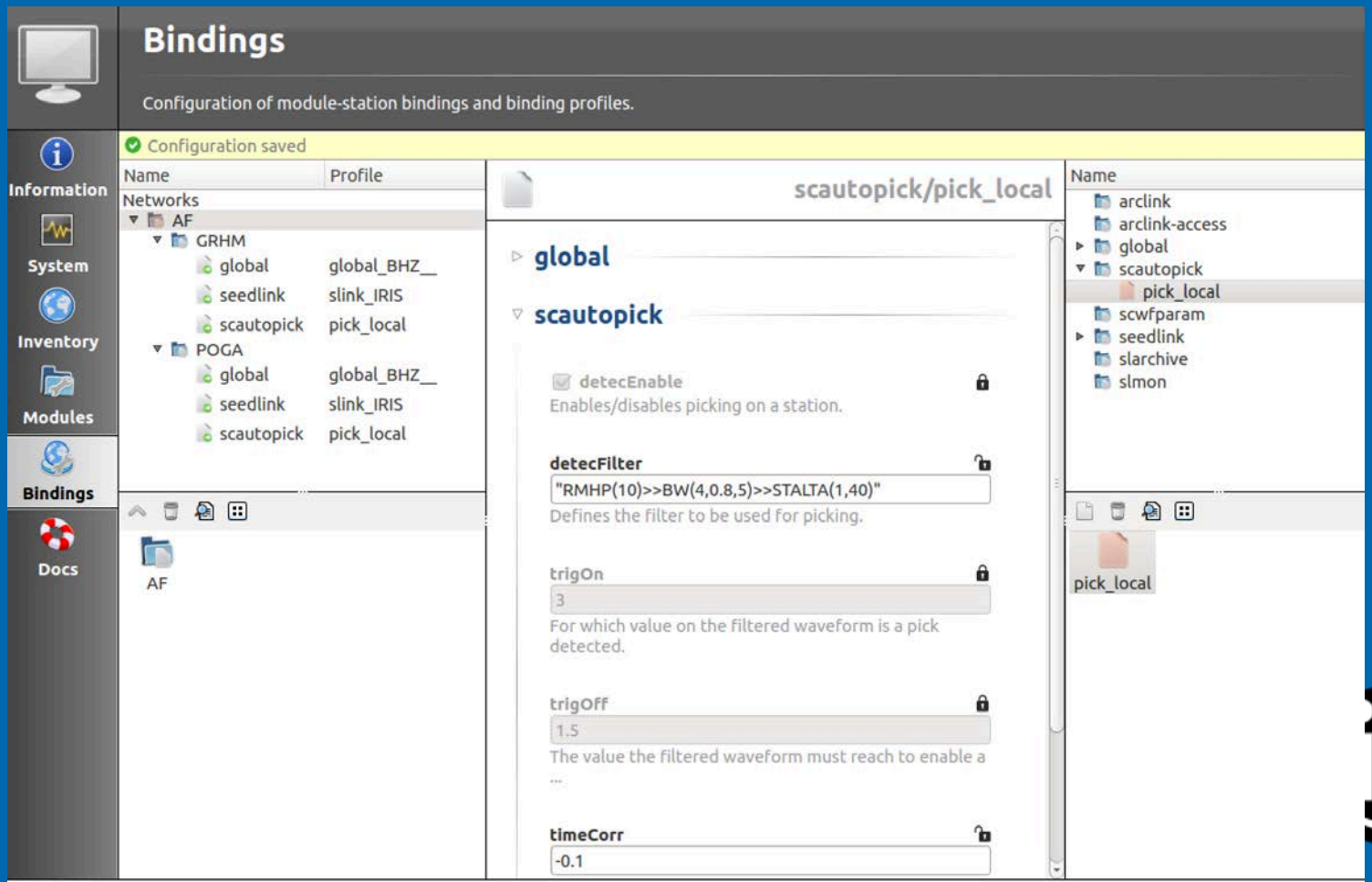
Seismic Picker

- Add a new profile called “pick_local”, double click to open up to see options

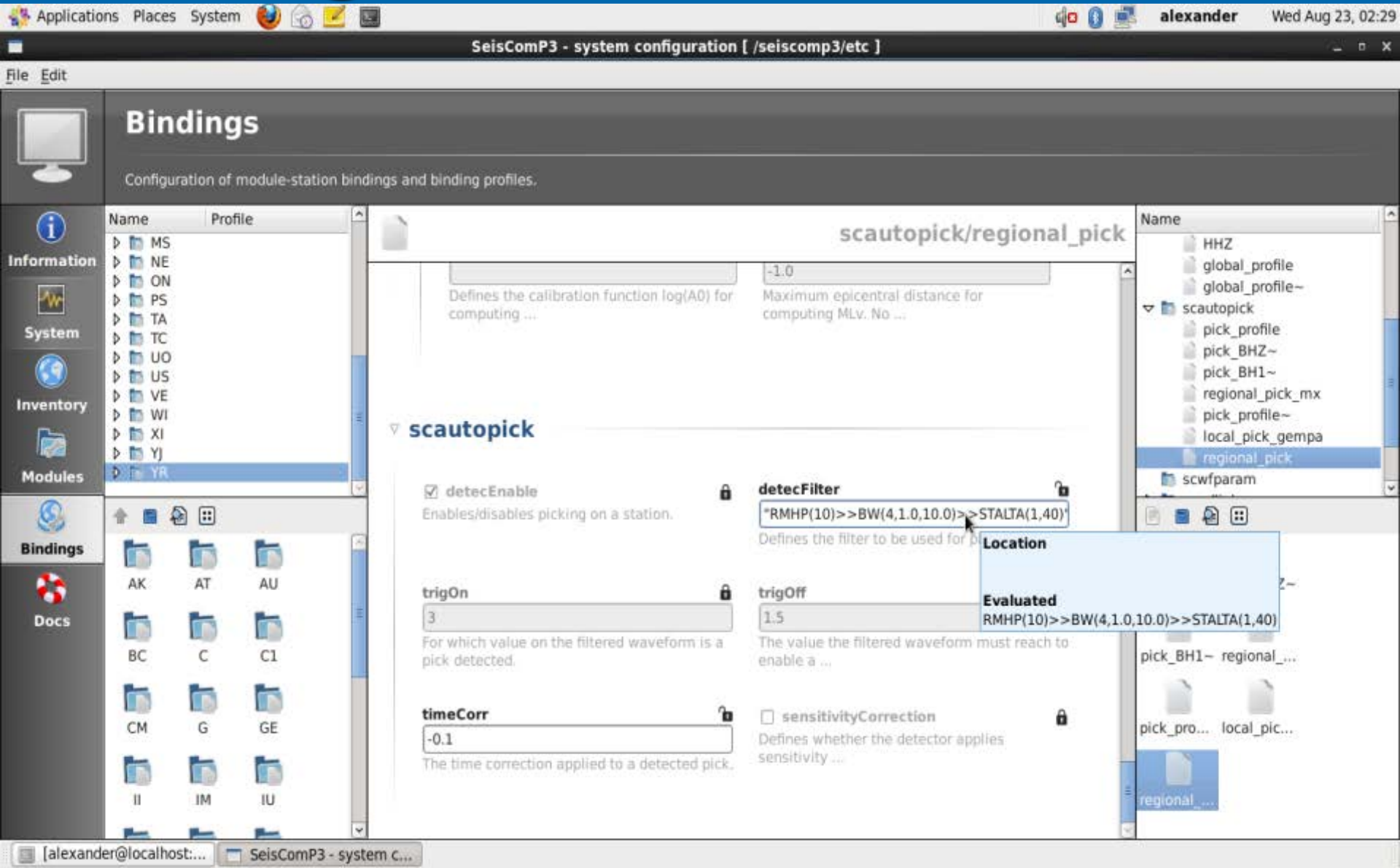


Local Seismic Picker

- Change TIME_CORR to -0.1

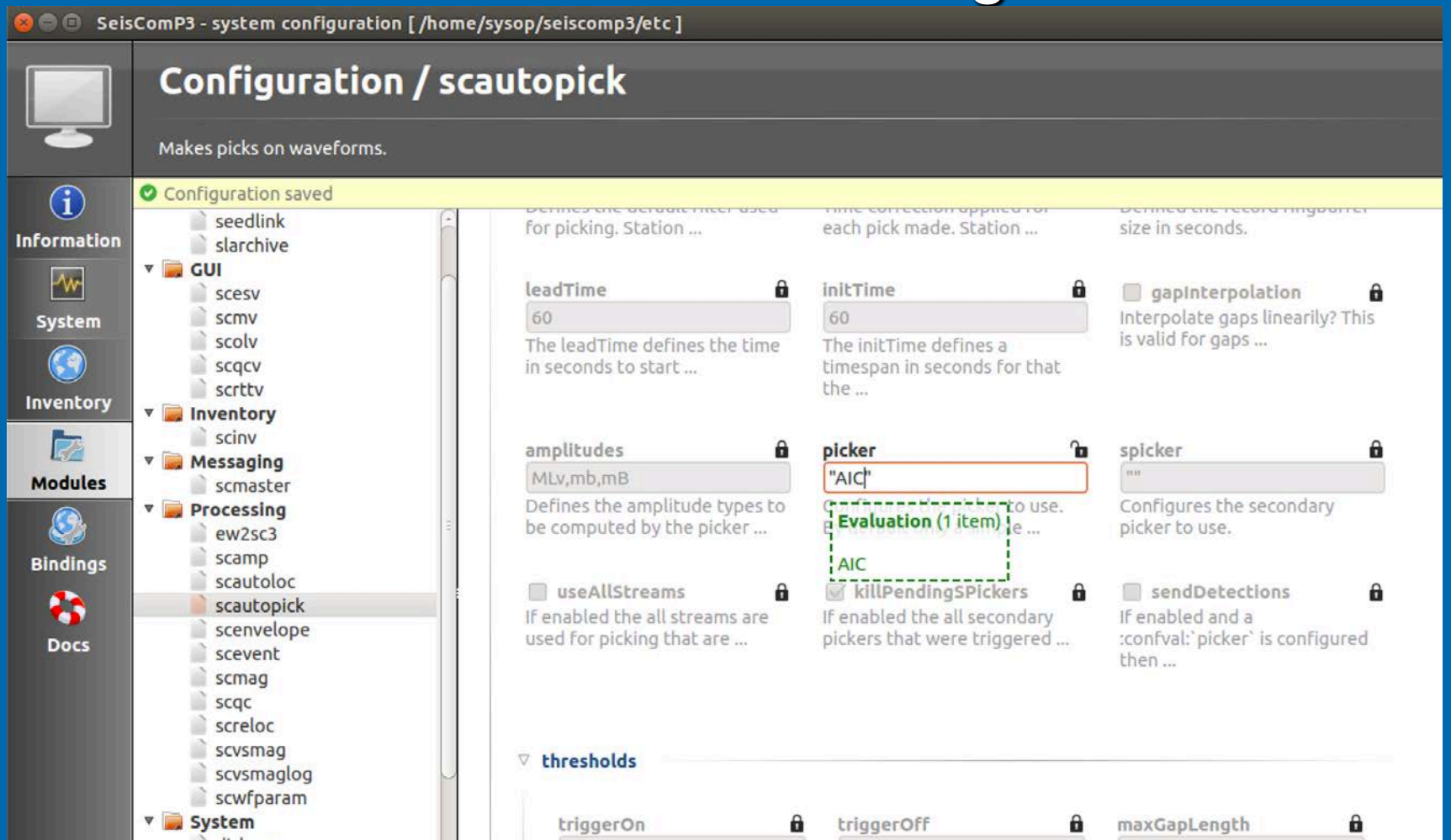


Regional Seismic Picker

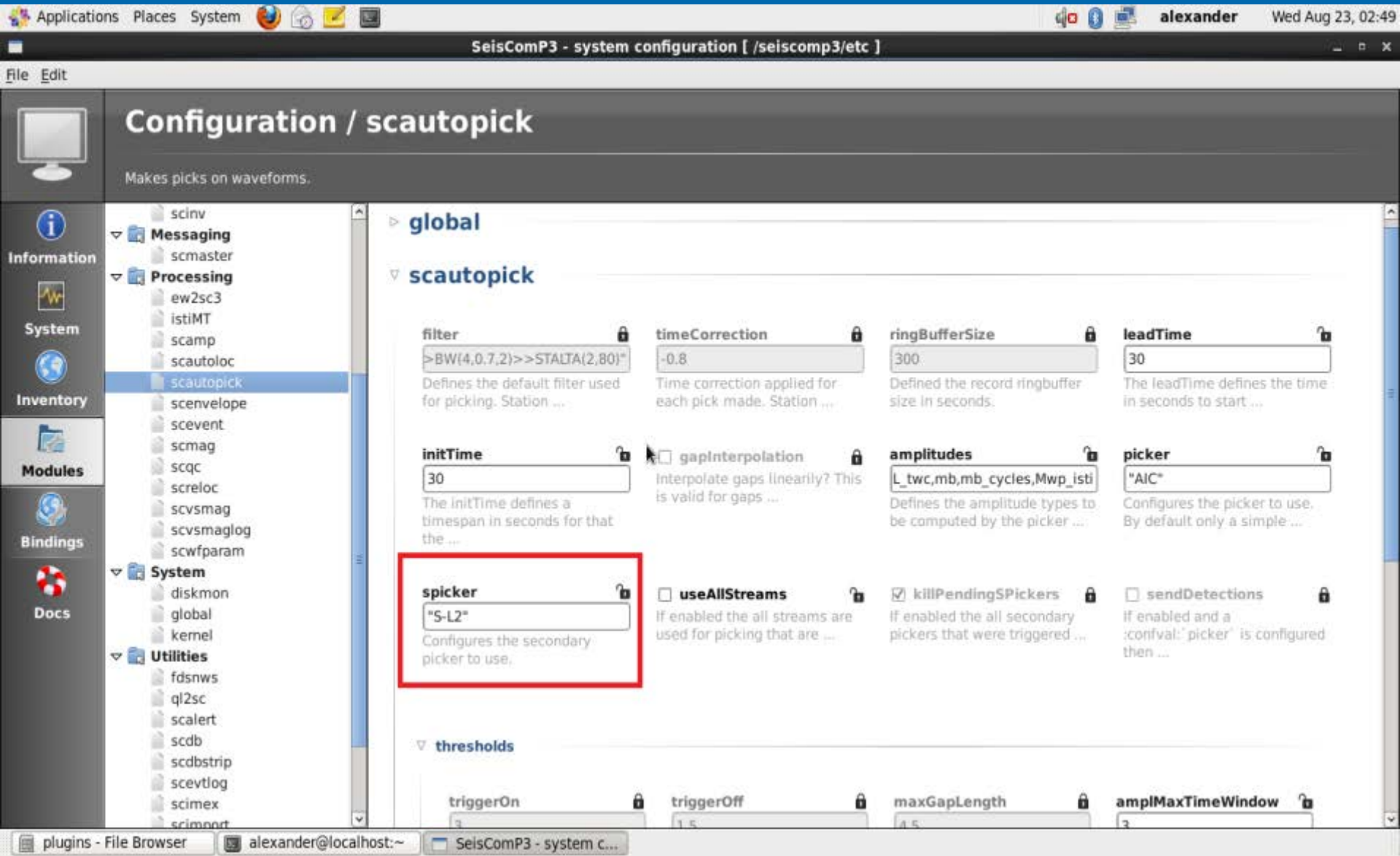


Additional Picker Options

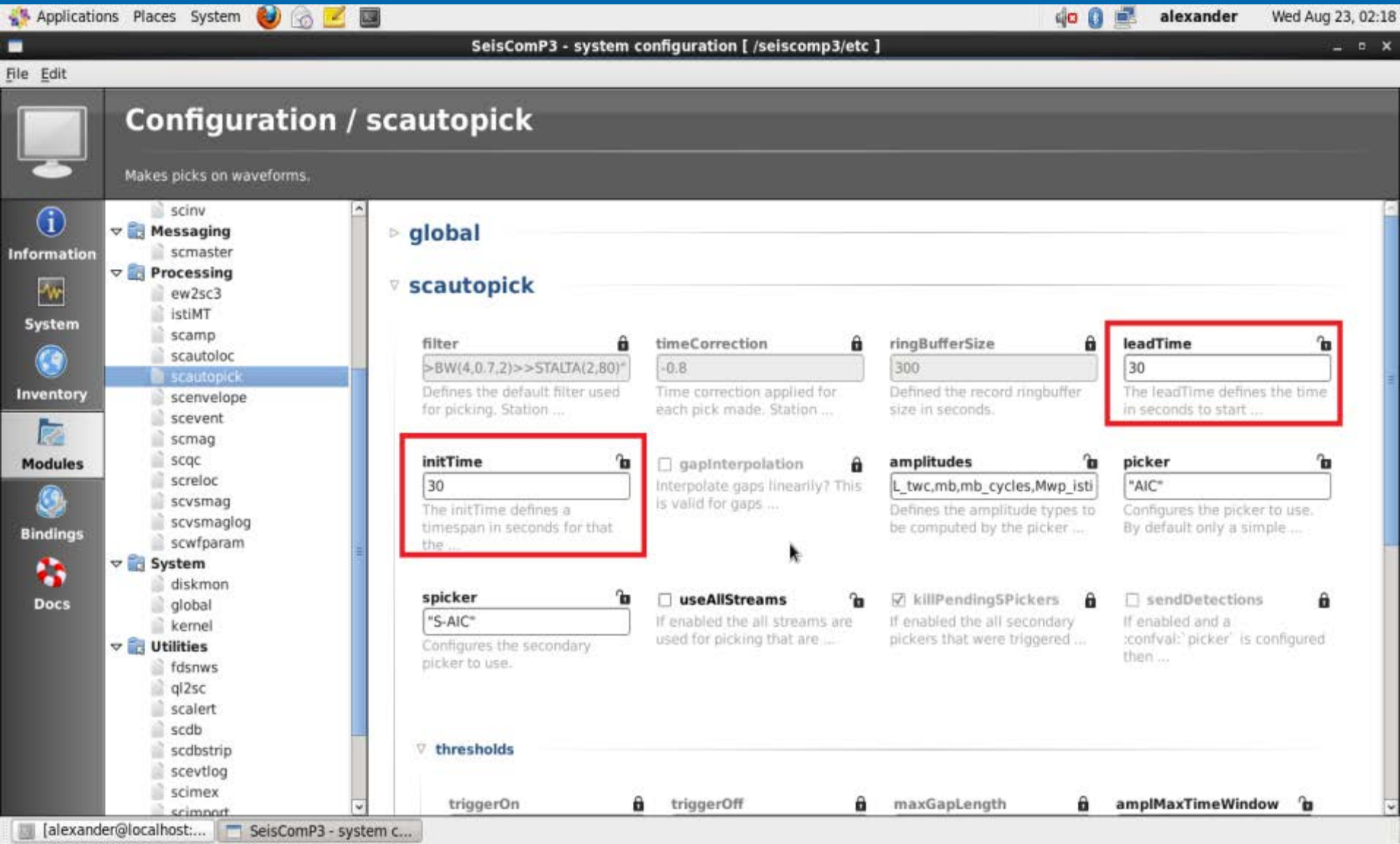
- Set the Picker to use. AIC is good for



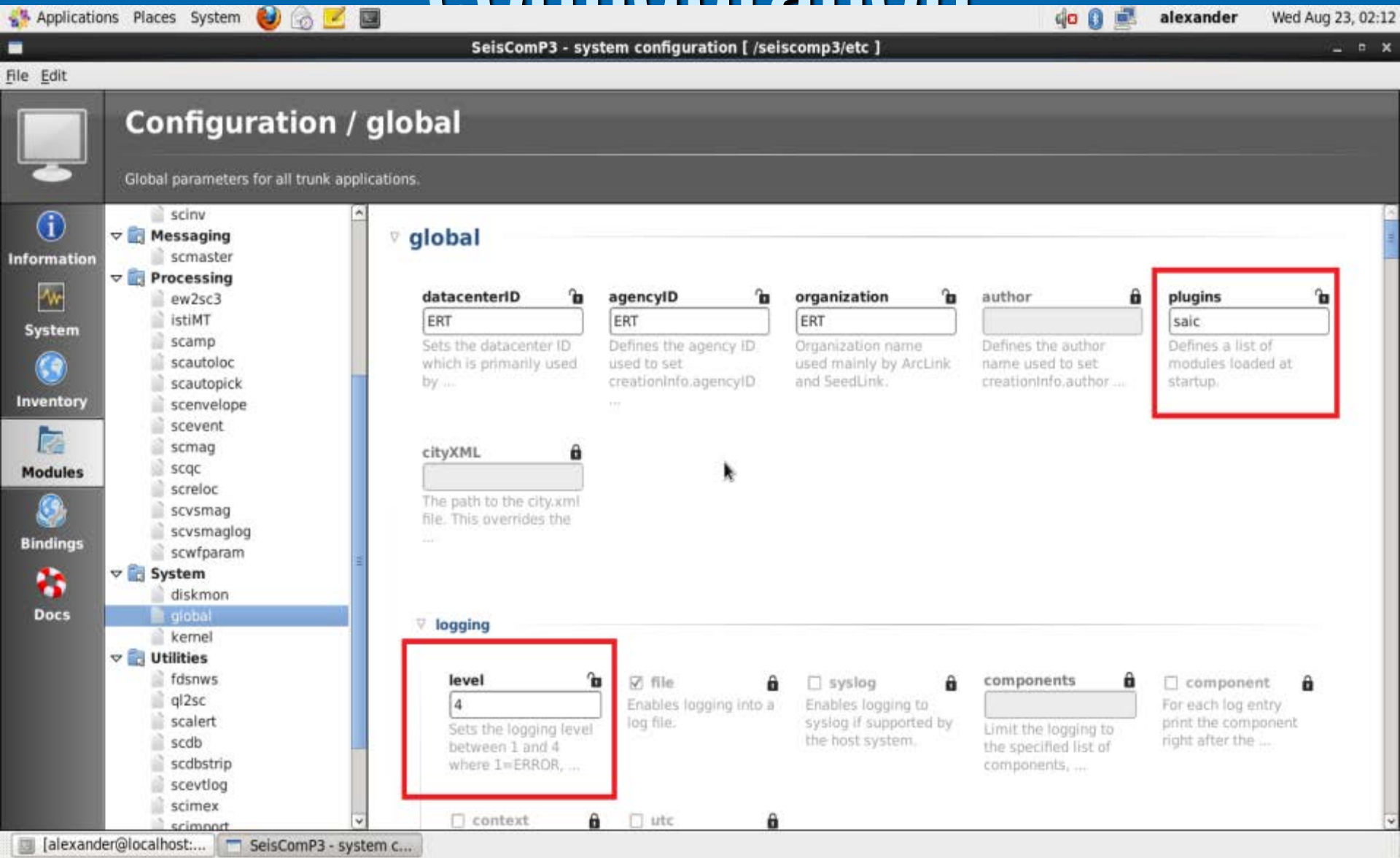
Enable S Picker



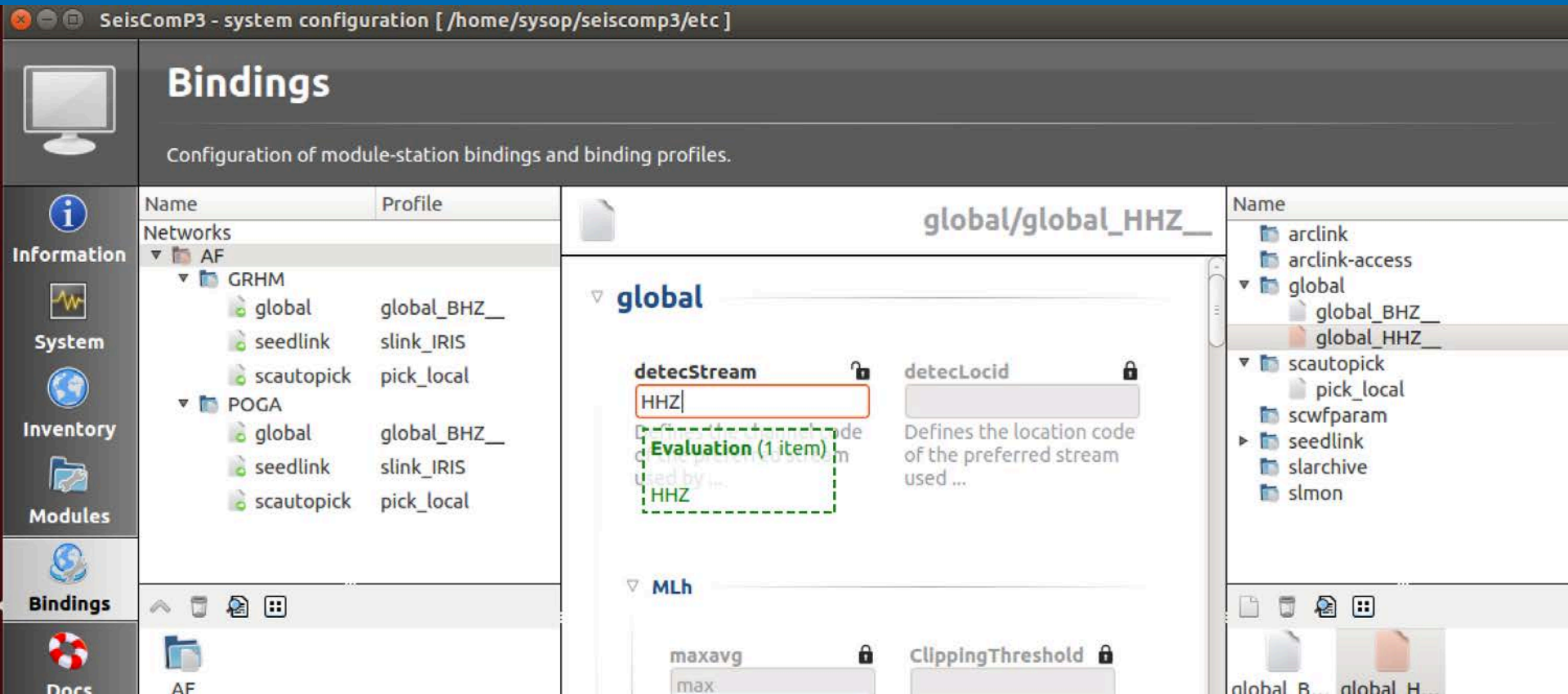
Edit the lead and init times:



Add in ‘saic’ plugin in global configuration



Additional Global Profile Local



Seismic Picker

- automatic 2 level P and S picker AIC - from Switzerland, one by GFZ, STA/LTA. IRIS financed S picker
- AIC - Timestamp detection, configurable time window. better pick, fewer fake picks. better quality and exclude fake picks AIC.

Seismic Picker

- local BW (4,4,20)>>STALTA(0.2,10) [recommended that you have at least 50hz data]
- regional BW(4,1.0,10.0)>>STALTA(1,40)
- teleseismic BW(4,0.7,2)>>STALTA(2,80)

- In general, the more local you go, the more you can utilize higher frequencies
- The more local you go, the short the time window you want

Run These Modules

- *Processing:*
- scamp
- scautoloc
- scautopic
- scevent
- scmag

Core:

scmaster

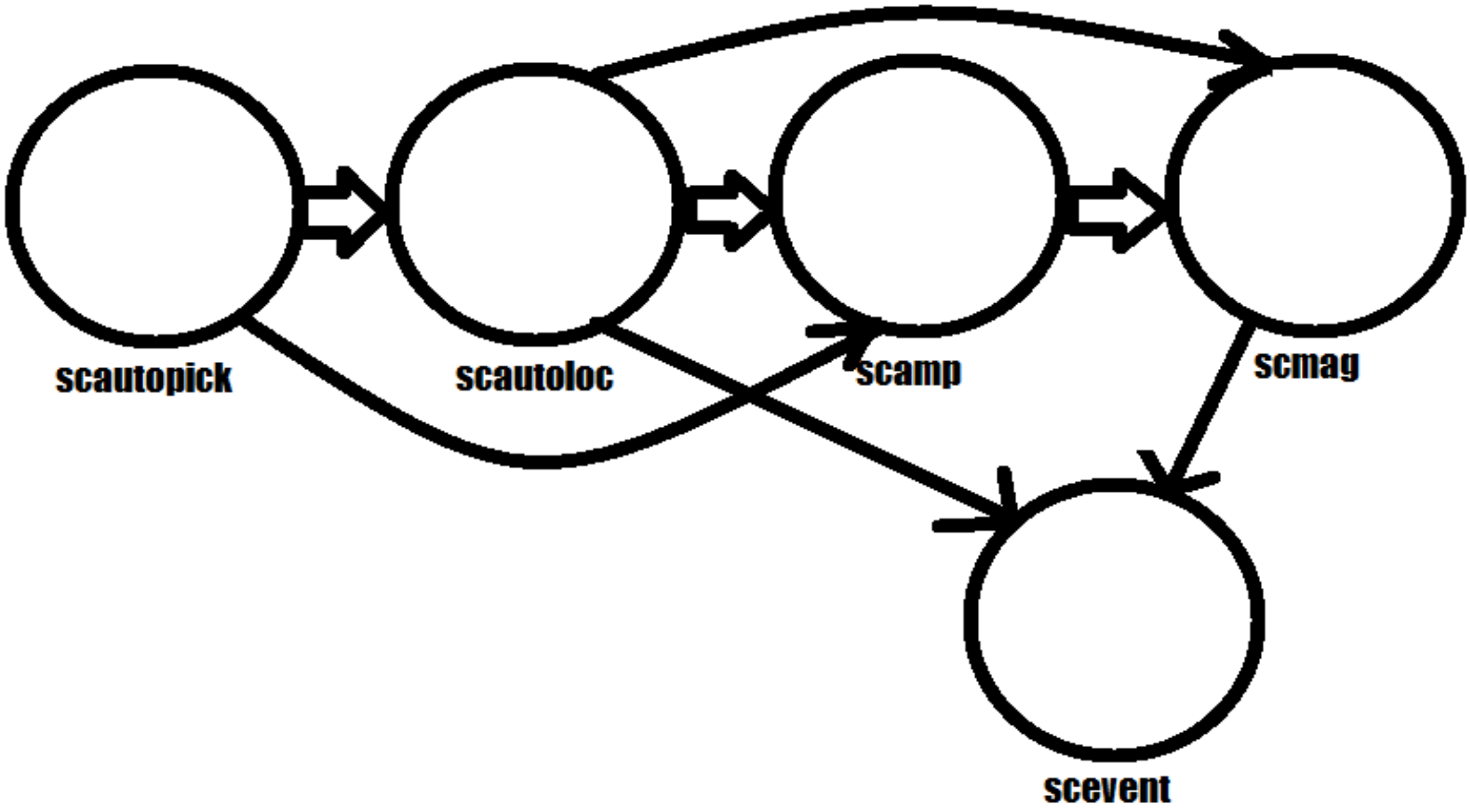
spread

Acquisition:

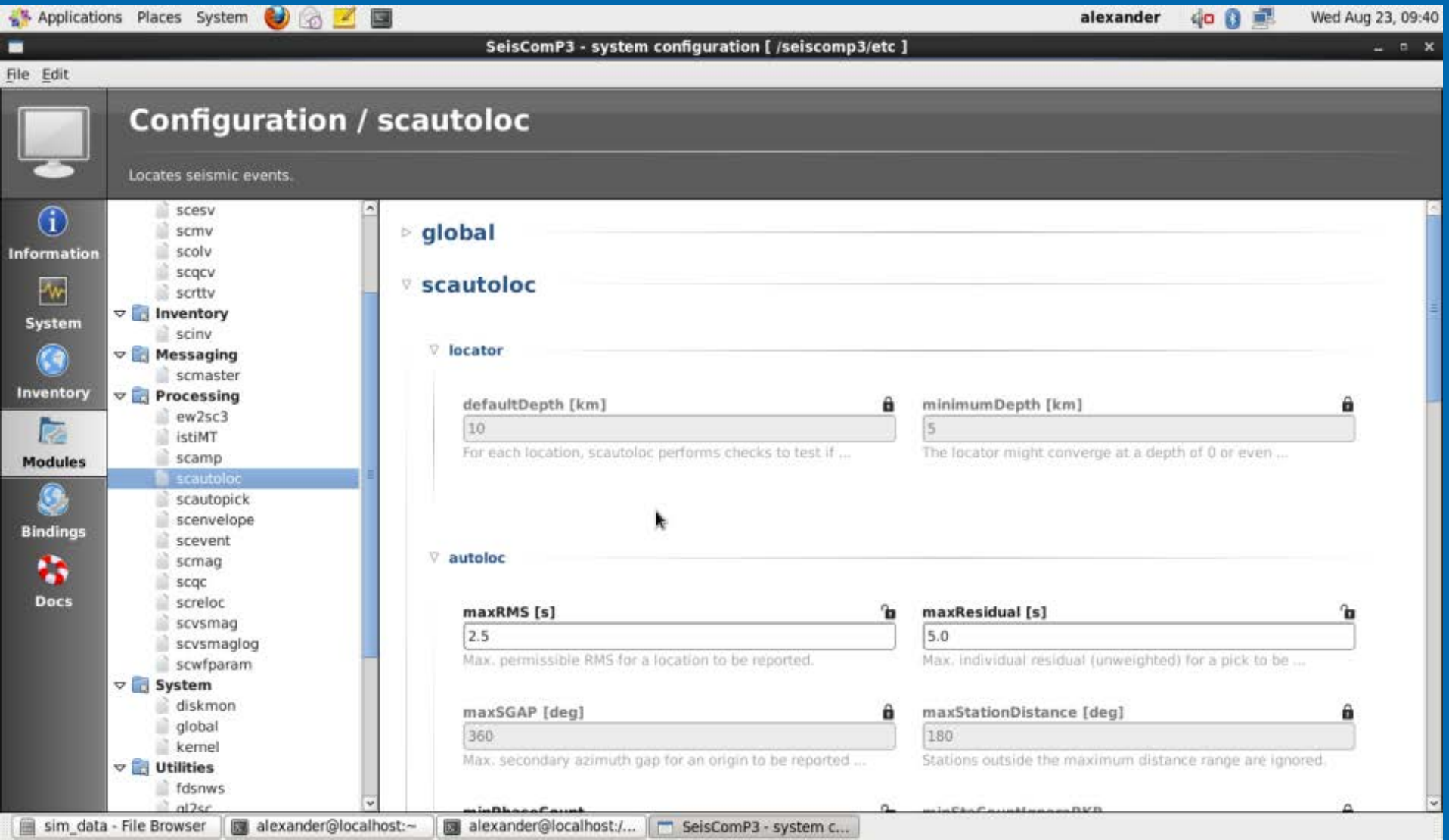
seedlink

slarchive

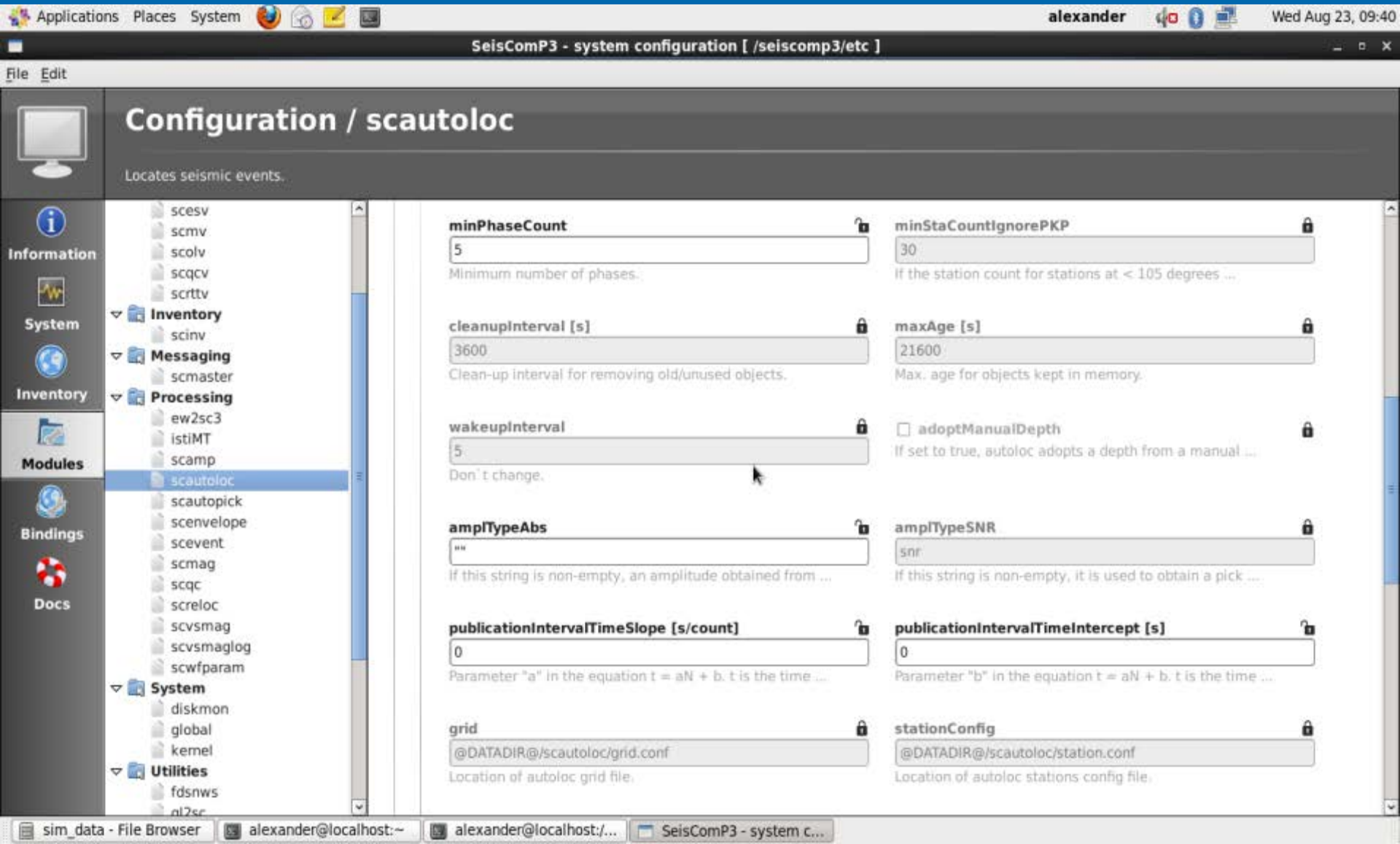
Processing flow

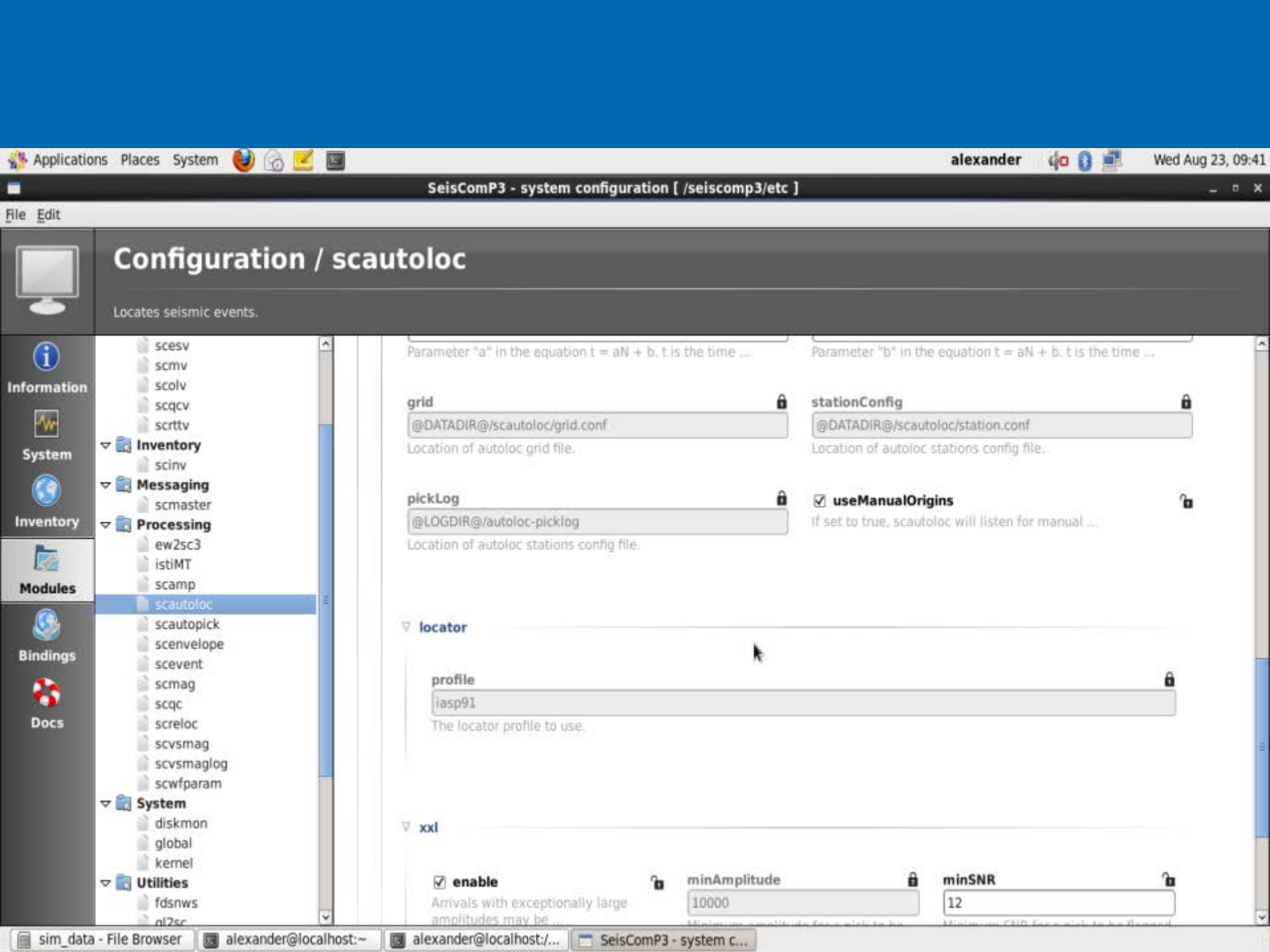


Configuring scautoloc



Scautoloc config, cont




Applications Places System
alexander
Wed Aug 23, 09:41
SeisComP3 - system configuration [/seiscomp3/etc]
File Edit
Configuration / scautoloc
Locates seismic events.
Information
System
Inventory
Modules
Bindings
Docs
scesv
scmv
scolv
scqcv
scrttv
Inventory
scinv
Messaging
scmaster
Processing
ew2sc3
istiMT
scamp
scautoloc
scautopick
scenvelope
scevent
scmag
scqc
screloc
scvsmag
scvsmaglog
scwfparam
System
diskmon
global
kernel
Utilities
fdsnws
Parameter "a" in the equation t = aN + b. t is the time ...
Parameter "b" in the equation t = aN + b. t is the time ...
grid
@DATADIR@/scautoloc/grid.conf
Location of autoloc grid file.
stationConfig
@DATADIR@/scautoloc/station.conf
Location of autoloc stations config file.
pickLog
@LOGDIR@/autoloc-picklog
Location of autoloc stations config file.
useManualOrigins
If set to true, scautoloc will listen for manual ...
locator
profile
iasp91
The locator profile to use.
xxl
enable
Arrivals with exceptionally large amplitudes may be ...
minAmplitude
10000
minSNR
12
sim_data - File Browser
alexander@localhost:~
alexander@localhost:/...
SeisComP3 - system c...

Grid.conf

Applications Places System alexander Wed Aug 23, 09:45

grid.conf (/seiscomp3/share/scautoloc) - GVIM

File Edit Tools Syntax Buffers Window Help

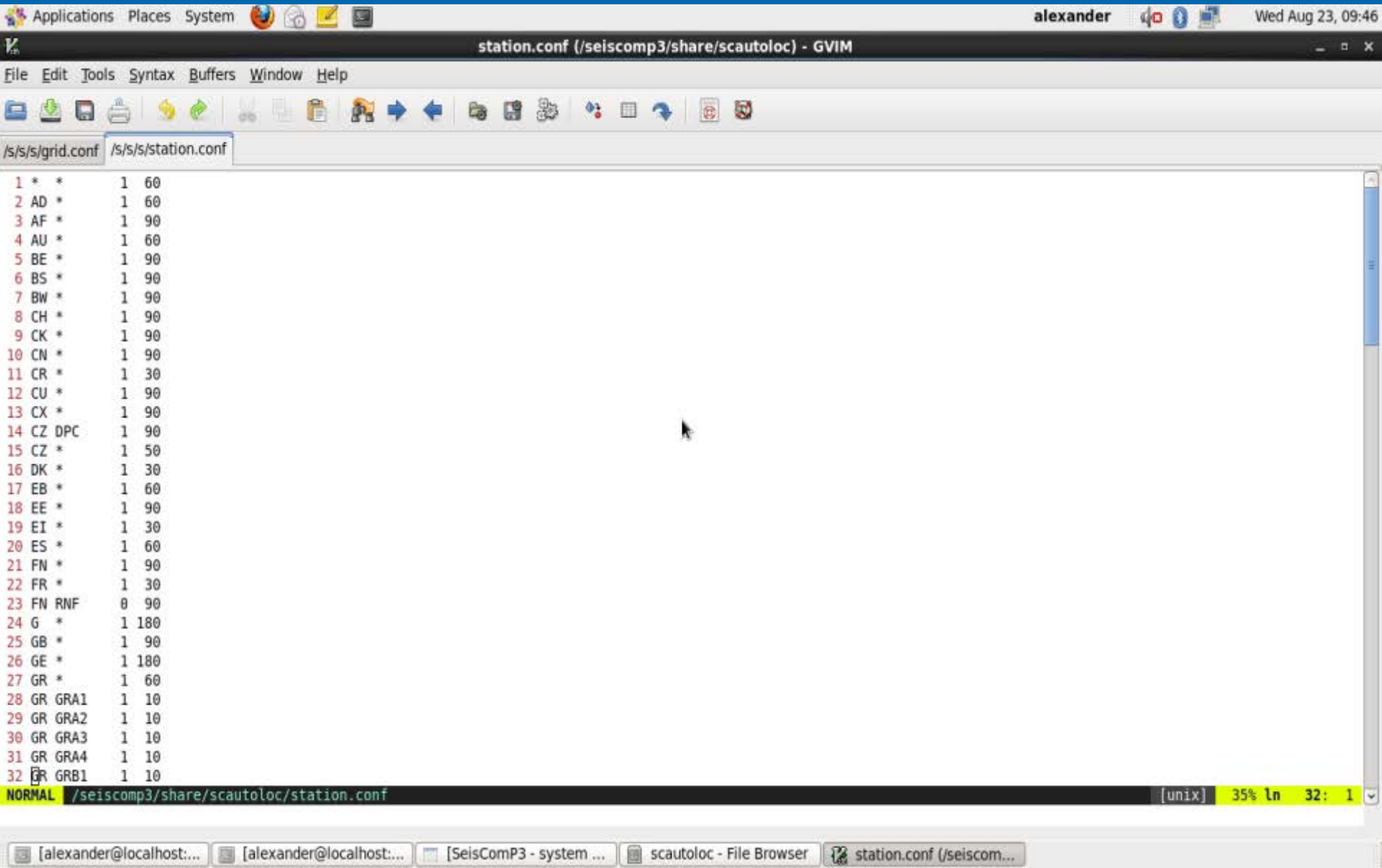
/s/s/s/grid.conf

```
 1 -90.00   0.00  33.0  4.00 180.0 6
 2 -85.00   0.00  33.0  4.00 180.0 6
 3 -85.00  60.00  33.0  4.00 180.0 6
 4 -85.00 120.00  33.0  4.00 180.0 6
 5 -85.00 180.00  33.0  4.00 180.0 6
 6 -85.00 240.00  33.0  4.00 180.0 6
 7 -85.00 300.00  33.0  4.00 180.0 6
 8 -80.00   0.00  33.0  4.00 180.0 6
 9 -80.00  27.69  33.0  4.00 180.0 6
10 -80.00  55.38  33.0  4.00 180.0 6
11 -80.00  83.08  33.0  4.00 180.0 6
12 -80.00 110.77  33.0  4.00 180.0 6
13 -80.00 138.46  33.0  4.00 180.0 6
14 -80.00 166.15  33.0  4.00 180.0 6
15 -80.00 193.85  33.0  4.00 180.0 6
16 -80.00 221.54  33.0  4.00 180.0 6
17 -80.00 249.23  33.0  4.00 180.0 6
18 -80.00 276.92  33.0  4.00 180.0 6
19 -80.00 304.62  33.0  4.00 180.0 6
20 -80.00 332.31  33.0  4.00 180.0 6
21 -75.00   0.00  33.0  4.00 180.0 6
22 -75.00  18.95  33.0  4.00 180.0 6
23 -75.00  37.89  33.0  4.00 180.0 6
24 -75.00  56.84  33.0  4.00 180.0 6
25 -75.00  75.79  33.0  4.00 180.0 6
26 -75.00  94.74  33.0  4.00 180.0 6
27 -75.00 113.68  33.0  4.00 180.0 6
28 -75.00 132.63  33.0  4.00 180.0 6
29 -75.00 151.58  33.0  4.00 180.0 6
30 -75.00 170.53  33.0  4.00 180.0 6
31 -75.00 189.47  33.0  4.00 180.0 6
32 -75.00 208.42  33.0  4.00 180.0 6
```

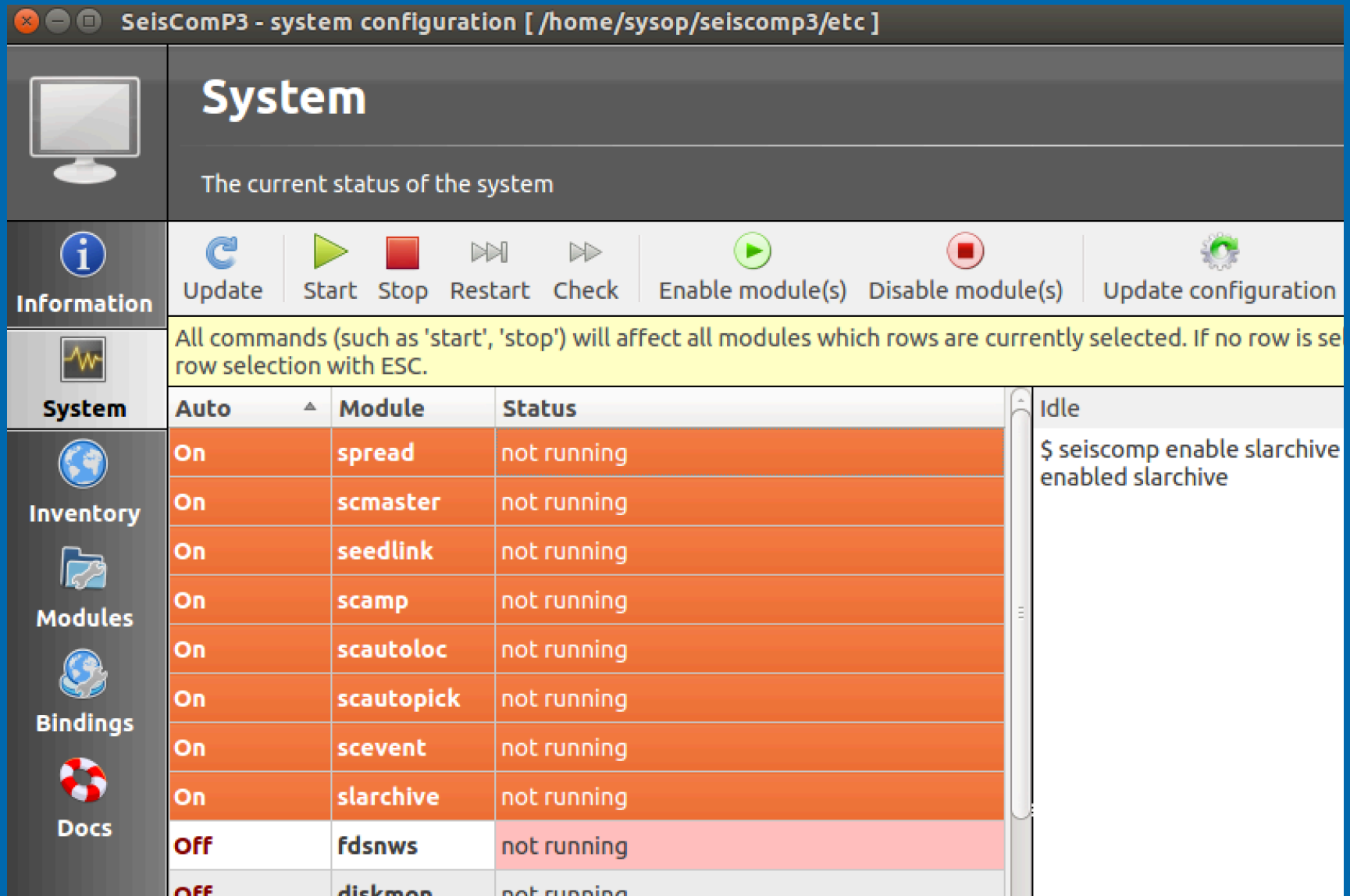
NORMAL /seiscomp3/share/scautoloc/grid.conf [unix] 0% ln 1: 1

[alexander@localhost:... [alexander@localhost:... [SeisComP3 - system ... scautoloc - File Browser grid.conf (/seiscomp3/...

Station.conf



First Enable; then Start



Running an event

- For this class, we will be primarily running ‘canned’ events from miniseed files
- Miniseed files are easy to come by and may be generated via request to IRIS (I prefer the Breqfast web tool here: https://ds.iris.edu/ds/nodes/dmc/forms/breqfast-request/)
- Generally, for playing back data on your own network, you’ll want to have saved data via slarchive